

IN THE CLAIMS:

Claims 1, 2 and 4 through 13 are currently pending in the above-identified application. Please cancel Claim 3 without prejudice or disclaimer. Also, please amend Claims 1, 2 and 4 through 13, as follows:

1. (Currently Amended) An electronic component for high frequency power amplification, said electronic component comprising:

a power amplification circuit which is coupled between an input terminal and an output terminal [[for]] and which ~~amplifying~~ amplifies a modulated high frequency signal; [[and]]

an output power detection circuit [[for]] which ~~detecting~~ detects a magnitude of an output power of the power amplification circuit and outputting a signal for enabling feedback control of the output power of said power amplification circuit [[,]]
; and

an impedance matching circuit coupled between an output of the power amplification circuit and the output terminal, wherein said impedance matching circuit comprises:

a microstrip line comprised of a conductor layer having one end connected to an output terminal of a final-stage amplifier element of said power amplification circuit, and

first and second capacitor elements connected between respective portions of the microstrip line and power source potential points, and

wherein a monitor voltage extraction point is provided between the portion connected to said first capacitor element and the portion connected to said second capacitor element, of said microstrip line; and

wherein said output power detection circuit receives a monitor voltage from the ~~the~~ [[an]] impedance matching circuit ~~provided closer to an output of said power amplification circuit~~ via a capacitor element coupled between the impedance matching circuit and the output power detection circuit [[and]] so that the output power detection circuit detects the output power of the power amplification circuit.

2. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim 1, further comprising:
 - ~~wherein~~ a resistor element [[is]] connected in series to said capacitor element between said capacitor element and the [[a]] monitor voltage extraction point in the impedance matching circuit.
3. (Cancelled)
4. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim 1,
 - wherein said output power detection circuit comprises:
 - a first transistor having a control terminal to which the monitor voltage supplied via said capacitor element is applied;
 - a second transistor connected in series to the first transistor;
 - a third transistor current mirror connected to the second transistor;
 - a current-to-voltage conversion transistor connected in series to the third transistor;
 - a bias generation circuit for ~~giving~~ supplying an operating point to the control terminal of said first transistor; and
 - a subtraction circuit for outputting, as a detected signal, a voltage in accordance with a difference between a voltage converted by said current-to-voltage conversion transistor and a voltage ~~given~~ supplied to said first transistor by said bias generation circuit.
5. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim [[1]] 4,
~~including~~ further comprising:
 - a bias circuit which is coupled to said power amplification circuit for-giving supplying a bias to said power amplification circuit.
6. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim 5,

wherein said bias generation circuit ~~is constructed to give such~~ provides a bias voltage [[as]] to ~~cause~~ said first transistor to perform a class-B amplifying operation.

7. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim 1,

wherein said power amplification circuit and said output power detection circuit are formed over a single semiconductor chip.

8. (Currently Amended) An electronic component for high frequency power amplification, said electronic component comprising:

a power amplification circuit for amplifying a modulated high frequency signal;

a current detection circuit ~~having a transistor for output detection~~ which receives an input signal to the power amplification circuit and detects a current in the power amplification circuit; and

current-to-voltage conversion means for converting the current detected by the current detection circuit to a voltage,

wherein said electronic component ~~outputting~~ outputs a detection signal for enabling feedback control of an output power of said power amplification circuit, and

wherein said current detection circuit includes:

a first transistor for receiving the input signal to said power amplification circuit at a control terminal thereof;

a second transistor connected in series to the first transistor; and

a third transistor current mirror connected to said second transistor, and
wherein said current-to-voltage conversion means has a fourth transistor connected in series to said third transistor.

9. (Currently Amended) The [[An]] electronic component for high frequency power amplification according to claim 8,

wherein said current detection circuit further includes:

a lowpass filter for extracting a dc component of said input signal; and

a subtraction circuit for outputting a signal, as [[a]] the detection signal, a ~~voltage~~ in accordance with a difference between [[a]] the voltage converted by said

~~fourth transistor~~ current-to-voltage conversion means and the dc component of said input signal extracted by said lowpass filter.

10. (Currently Amended) The ~~[[An]]~~ electronic component for high frequency power amplification according to claim 8, further comprising:

a bias circuit which is coupled to the power amplification circuit for ~~giving~~ supplying a bias to said power amplification circuit.

11. (Currently Amended) A wireless communication system, comprising:

~~[an]~~ a first electronic component ~~for high frequency power amplification, said electronic component~~ comprising:

a power amplification circuit for amplifying a modulated high frequency signal; and

an output power detection circuit for detecting a magnitude of an output power of the power amplification circuit and outputting a detection signal for enabling feedback control of the output power of said power amplification circuit,

wherein said output power detection circuit receives a monitor voltage from an impedance matching circuit provided closer to an output of said power amplification circuit via a capacitor element and detects the output power of the power amplification circuit;

a second electronic component including a transmission/reception switching circuit for performing switching between a signal to be transmitted and a received signal; and

a third electronic component for modulating the signal to be transmitted and inputting the modulated signal to said first electronic component ~~for high frequency power amplification,~~

wherein said third electronic component includes:

a gain control amplification circuit capable of controlling an amplitude of the signal to be transmitted which is supplied to said first electronic component ~~for high frequency power amplification;~~ and

an output level control circuit for comparing ~~[[a]]~~ the detection signal ~~of an output power of said power amplification circuit which is supplied from~~

~~said output power detection circuit~~ with an output level indication signal and ~~giving~~ supplying a control signal to said gain control amplification circuit to change a gain.

12. (Currently Amended) A wireless communication system, comprising:

[an] a first electronic component ~~for high frequency power amplification, said electronic component~~ comprising:

a power amplification circuit for amplifying a modulated high frequency signal; and

an output power detection circuit for detecting a magnitude of an output power of the power amplification circuit and outputting a detection signal for enabling feedback control of the output power of said power amplification circuit,

wherein said output power detection circuit receives a monitor voltage from an impedance matching circuit provided closer to an output of said power amplification circuit via a capacitor element and detects the output power of the power amplification circuit, including a bias circuit for ~~giving~~ supplying a bias to said power amplification circuit;

a second electronic component including a transmission/reception switching circuit for performing switching between a signal to be transmitted and a received signal;

a third electronic component for modulating the signal to be transmitted and inputting the modulated signal to said first electronic component ~~for high frequency power amplification~~; and

an output level control circuit for comparing [[a]] the detection signal ~~of an output power of said power amplification circuit which is supplied from said output power detection circuit~~ with an output level indication signal and ~~giving~~ supplying a control signal to said bias circuit to change a bias given to said power amplification circuit.

13. (Currently Amended) The [[A]] wireless communication system according to claim 11,

wherein said first electronic component ~~for high frequency power amplification~~ includes:

a first power amplification circuit for amplifying a first signal in a first frequency band; and

a second power amplification circuit for amplifying a second signal in a second frequency band,

wherein said second electronic component has signal switching means for performing switching between the first signal in the first frequency band and the second signal in the second frequency band, and

wherein said third electronic component has a first circuit for modulating the first signal in the first frequency band and a second circuit for modulating the second signal in the second frequency band, and said output power detection circuit is provided as a common circuit for said first and second power amplification circuits.